

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph nos. [0033] to [0039] of the published application as follows:

[0033] Reference is made initially to FIG. 1 showing the structure of a vacuum pump 1 of the turbomolecular type, secured to the wall 2-2' of a stationary structure 3 such as vacuum enclosure.

[0034] The turbomolecular vacuum pump 1 comprises a pump body 4 in which a rotor 5 rotates at high speed about an axis of rotation I. The pump body 4 has a suction orifice 6 on the axis, through which the pumped gas 7 penetrates, and an exhaust orifice 8 through which the outlet gas 9 is exhausted. The rotor 5 is rotated in the pump body 4 by an internal motor 10, and it is guided laterally by magnetic or mechanical bearings 11 and 12.

[0035] The wall 2-2' of the vacuum enclosure 3 has an outlet orifice 13 corresponding to the suction orifice 6 of the vacuum pump 1, and generally constitutes a closed enclosure that is isolated from the outside and in which the vacuum pump 1 can establish a controlled vacuum.

[0036] A coaxial annular flange 14-14' is provided on the vacuum pump body 4 around the suction orifice 6 in order to fasten the vacuum pump 1 to the wall 2-2' of the stationary structure 3 constituted by a vacuum enclosure. Thus, the vacuum pump 1 is fastened to the wall 1 of the stationary structure 3, such as the vacuum enclosure, around the periphery of the outlet orifice 13 and the suction orifice 6.

[0037] In compliance with the standards presently in force, tapped holes are provided in the wall 2-2' of the stationary structure 3, which holes are distributed around the outlet orifice 13, and through holes are provided in the coaxial flange 14-14', with headed screws being fitted so that their shanks pass through the through holes and are screwed into the associated tapped holes in order to secure the vacuum pump 1 to the stationary structure 3 by pressing the flange 14-14' against the wall 2-2' of the stationary structure 3.

[0038] FIGS. 2 and 3 show a prior art fastener system complying with the standards presently in force. This figure shows a fragment of the coaxial annular flange 14-14' forming part of the pump body 4, and the wall 2-2' of the stationary structure with a tapped hole 15-15'. The flange 14-14' has a circularly cylindrical through hole 16-16'. A screw 17-17' having a head 18-18' and a shank 19-19' is fitted so that its shank 19-19' passes through the through hole 16-16' in the flange 14-14' and is screwed into the tapped hole 15-15' in the wall 2-2'. The diameter of the shank 19-19' of the screw 17-17' is slightly smaller than the diameter of the through hole 16-16' in the flange 14-14', leaving no more than the usual functional clearance of about 0.5 mm between the shank 19-19' of the screw 17-17' and the wall of the through hole 16-16'.

[0039] FIG. 3 shows the same items identified by the same numerical references. In the event of the rotor being destroyed while rotating at full speed, the kinetic energy accumulated in the rotor is transmitted to the pump body 4 which tends to move laterally. This applies shear

stresses to the screw shanks ~~19~~19', as represented by arrows 20 and 21, which stresses can lead to a shank ~~19~~19' rupturing as shown in FIG. 3. The invention seeks to avoid such rupture in order to guarantee that the vacuum pump 1 continues to remain secured to the wall ~~2~~2' of the stationary structure 3, even in the event of its rotor being destroyed while rotating at full speed.

Please amend paragraph no. [0053] of the published application as follows:

[0053] The system can be further improved by inserting an elastomer type damper material E in the space between the screw shank 19 and the corresponding through hole 16 in the flange 14.